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**ISSUING DATE:**

2008.03.28

Application NO: 200480027534.8

Applicant: SIEMENS AKTIENGESELLSCHAFT

Title: DEVICE FOR ADJUSTING THE IMPEDANCE OF A ...

Agent:

Yali Shao

## THE FIRST OFFICE ACTION

(PCT application for entry into the national phase)

1. ☒ The applicant filed a request for substantive examination on Year \_\_\_ Month \_\_\_ Day \_\_\_. According to Article 35 paragraph 1 of the Patent Law, the examiner has conducted a substantive examination to the above-mentioned patent application.

☐ According to Article 35 paragraph 2 of the Patent Law, Chinese Patent Office decided, on its own initiative, to conduct a substantive examination to the above-mentioned patent application.

2. ☒ The applicant requested to take

Year 2008 Month 03 Day 28, on which an application is filed with the DE patent office, as the priority date,

Year \_\_\_ Month \_\_\_ Day \_\_\_, on which an application is filed with the \_\_\_ patent office, as the priority date,

Year \_\_\_ Month \_\_\_ Day \_\_\_, on which an application is filed with the \_\_\_ patent office, as the priority date.

3. ☐ The amended document(s) submitted by the applicant is/are not accepted because the said amendment(s) is/are not in conformity with the provision of Article 33 of the Chinese Patent Law.

☐ The Chinese translation of the annexes of the International Preliminary Examination Report.

☐ The Chinese translation of the amendments submitted under Article 19 of PCT.

☐ The amendment(s) submitted under Article 28 or Article 41 of PCT.

☐ The amendment(s) submitted under Rule 51 of The Implementing Regulations of the Patent Law

The concrete reason(s) for not accepting the amendment(S) is/are presented on the text of this Office Action.

4. ☒ The examination has been conducted on the initially filed Chinese translation of the text of the application.

☐ The examination has been conducted on the following text(s) :

☐ Specification, page(s) \_\_\_\_\_, as originally filed

page(s) \_\_\_\_\_, as the annexes of the International Preliminary Examination Report

page(s) \_\_\_\_\_, as the amendment(s) submitted under Article 28 or 41 of PCT

page(s) \_\_\_\_\_, as the amendment(s) submitted under Rule 51 of The Implementing

Regulations of the Patent Law

☐ Claim, \_\_\_\_\_, as originally filed

\_\_\_\_\_, as the Chinese translation of the amendment(s) submitted under Article 19 of PCT

\_\_\_\_\_, as the annexes of the International Preliminary Examination Report

\_\_\_\_\_, as the amendment(s) under Article 28 or 41 of PCT

\_\_\_\_\_, as the amendment(s) under Rule 51 of The Implementing Regulations of the Patent

Law

☐ Figure, \_\_\_\_\_, as originally filed

\_\_\_\_\_, as the annexes of the International Preliminary Examination Report

\_\_\_\_\_, as the amendment(s) under Article 28 or 41 of PCT

\_\_\_\_\_, as the amendments under Rule 51 of The Implementing Regulations of the Patent Law

5. ☒ The following reference document(s) is/are cited by this notification: (the reference numeral(s) thereof will be used in the examination procedure hereafter)

NO.	Reference No. and Title	Publishing Date (or the filing date of rivals)
1	US674851B1	Year <u>2001</u> month <u>08</u> day <u>14</u>
2		Year ___ month ___ day ___
3		Year ___ month ___ day ___
4		Year ___ month ___ day ___

6. Concluding comments

☐ on the specification:

☐ The specification is not in conformity with the provision of Rule 18 of the Implementing Regulations of the Patent Law.

☐ The figures is not in conformity with the provision of Rule 19 paragraph 3 of the Implementing Regulations of the Patent Law.

☐ The specification is not in conformity with the provision of Article 26 paragraph 3 of the Patent Law.

☐ The contents of the application are in contrary to Article 5 of the Patent Law and therefore are not patentable

☒ on the claims:

☐ Claim(s) \_\_\_\_\_ belong(s) to non-patentable subject matter as prescribed in Article 25 of the Patent Law

☒ Claim(s) 1-3, 11 do(es) not possess novelty as requested by Article 22 paragraph 2 of the Patent Law.

☒ Claim(s) 5-10, 12 do(es) not possess inventiveness as requested by Article 22 paragraph 3 of the Patent Law.

☐ Claim(s) \_\_\_\_\_ do(es) not possess the practical applicability as requested by Article 22 paragraph 4 of the Patent Law.

☐ Claim(s) \_\_\_\_\_ do(es) not comply with the provision of Article 26 paragraph 4 of the Patent Law.

☐ Claim(s) \_\_\_\_\_ do(es) not comply with the provision of Article 31 paragraph 1 of the Patent Law.

☒ Claim(s) 4, 6, 7 do(es) not comply with provision of Rule 20 of the Implementing Regulations.

☐ Claim(s) \_\_\_\_\_ do(es) not comply with provision of Rule 21 of the Implementing Regulations.

☐ Claim(s) \_\_\_\_\_ do(es) not comply with provision of Rule 22 of the Implementing Regulations.

☒ Claim(s) 7, 8 do(es) not comply with provision of Rule 23 of the Implementing Regulations.

☐ Claim(s) \_\_\_\_\_ do(es) not comply with the provision of Article 9 of the Patent Law.

☐ Claim(s) \_\_\_\_\_ do(es) not comply with the provision of Rule 12 paragraph 1 of the Implementing Regulations of the Patent Law.

The detailed analysis for the above concluding comments is/are presented on the text of this Office Action.

7. Based on the above concluding comments, the examiner is of the opinions that:

☐ The applicant should amend the application document(s) in accordance with the requirement as specified in the Office Action.

☒ The applicant should, in his observation, expound the patentability of the application, amend the defects pointed out in the Office Action; or the application can hardly be approved.

☐ The examiner deems that the application lacks substantive features to make it patentable. Therefore, the application will be rejected if no convincing reasons are provided to prove its patentability.

8. The applicant should pay attention to the following matters:

(1) According to Article 37 of the Patent Law, the applicant is required to submit his observations within **four** months upon receipt of this Office Action. If the time limit for making response is not met without any justified reason, the application shall be deemed to have been withdrawn.

(2) The amendment(s) made by the applicant must meet the provision of Article 33 of the Patent Law. The amended text should be in duplicate, its format should conform to the related confinement in the Guidance for Examination.

(3) **The observation and the amended document(s) must be mailed or delivered to the Receiving Section of the Chinese Patent Office. No legal effect shall apply for any document(s) that not mailed to or reached the Receiving Section.**

(4) Without being invited, the applicant and/or the agent should not go to the Chinese Patent Office to interview an examiner.

9. The text of this Office Action contains 3 page(s), and has the following attachment(s):

☒ 1 copies of the cited references, total 17 pages.

Examination Section No. \_\_\_\_\_ Examiner \_\_\_\_\_ Seal of Examination Dept. .For business only (if the Office Action wasn't stamped by the specified seal, it has no legal effect)

## TEXT OF THE FIRST OFFICE ACTION

Application No.: 200480027534.8

**Claims 1-3 and 11 do not possess novelty as prescribed in Article 22, clause 2 of the Patent Law of China; claims 5-10 and 12 do not possess inventiveness as prescribed in Article 22, clause 3 of the Patent Law of China.**

The present application relates to a device for adjusting the impedance of high voltage line supplying an alternating current. After examination, opinions in detail are provided as follows:

1. Claim 1 seeks protection for a “Vorrichtung zum Einstellen der Impedanz einer Wechselstrom führenden aus mehreren Phasen bestehenden Hochspannungsleitung”, whereas Reference 1 (US 6,274,851 B1) has disclosed a multiphase control device for adjusting alternating current and the following technical features in detail: the alternating current voltage source 12 providing a three phase 230k VAG via wires (equivalent to the “Hochspannungsleitung 9”), coil 40 (equivalent to the “Regelspule 2”) connected with the input wire in series, the controllable Silicon Controlled Rectifiers (SCR) 36 (equivalent to the “Schalteinrichtung 3”) connected with the coil 40 in series, the controller 18 (equivalent to the “Steuerungseinheit 4”) for controlling the SCRs 36 (see columns 4-6, 9 and 10 of the specification and Figs. 1 and 3). It can be seen that Reference 1 discloses all the technical features of claim 1, and the technical solution disclosed in Reference 1 and the technical solution sought for protection in said claim belong to a same technical field, solve the same technical problem and bring about same technical effects, so said claim does not possess novelty as prescribed in Article 22, clause 2 of the Patent Law of China.

2. Claim 2 is dependent claim to claim 1, whereas Reference 1 discloses that the SCRs 36 are composed of semiconductor thyristors connected in opposite (see Fig. 1); it can be seen that Reference 1 has disclosed all the technical features of claim 2; therefore, claim 2 does not possess novelty as prescribed in Article 22, clause 2 of the Patent Law of China since claim 1 to which claim 2 refers does not possess novelty.

3. Claim 3 refers to claims 1 and 2, whereas Reference 1 discloses that the controller 18 has zero-crossing detectors 46 (equivalent to the “Nulldurchgangseinheit 12”) connected with the current detectors, and a digital signal processor 50 (equivalent to the “Zündwinkelgeber 19”) is connected with a microcontroller 52 (equivalent to the “Auslöseeinheit”) (see columns 9 and 10 of the specification and Fig. 3). It can be

seen that Reference 1 has disclosed all the technical features of claim 3; therefore, claim 3 does not possess novelty as prescribed in Article 22, clause 2 of the Patent Law of China since claims 1 and 2 to which claim 3 refers do not possess novelty.

4. When claim 5 refers to claims 1-3, for those skilled in the art, it is a commonly used technical measure to connect a circuit which has a structure same to those of the "Regelspule 2" and the "Schalteinrichtung 3" in series in order to adjust the resistance of the coils; therefore, it is obvious for those skilled in the art to obtain the technical solution sought for protection in said claim by combining the technical measure used commonly in the art with Reference 1 as a basis; therefore, since claim 5 refers to claim 1-3, the technical solution sought for protection in claim 5 does not bring about any prominent substantive features or represent a notable progress, and thus does not possess inventiveness as prescribed in Article 22, clause 3 of the Patent Law of China.

5. When claim 6 refers to claim 5, for those skilled in the art, it is a commonly used technical measure to control a switch with two triggering units; therefore, claim 6 does not possess inventiveness as prescribed in Article 22, clause 3 of the Patent Law of China since claim 5 to which claim 6 refers does not possess inventiveness.

6. Claim 7 refers to claims 5 and 6; for those skilled in the art, it is a conventional choice in the art to choose a semiconductor thyatron connected in opposite or a mechanical switch; therefore, it is a commonly used technical measure for those skilled in the art to choose one which is a mechanical switch and the other is a semiconductor thyatron; therefore, claim 7 does not possess inventiveness as prescribed in Article 22, clause 3 of the Patent Law of China since claims 5 and 6 to which claim 7 refers do not possess inventiveness.

7. When claim 8 refers to claims 1-3 and 5-7, for those skilled in the art, they are commonly used technical measures to compensate the circuit with the capacitor connected with the coil 2 in series and to control the work of the capacitor with a switch; therefore, it is obvious for those skilled in the art to obtain the technical solution sought for protection in said claim by combining the technical measures used commonly in the art with Reference 1 as a basis; therefore, the technical solution sought for protection in claim 8 does not bring about any prominent substantive features or represent a notable progress, and thus does not possess inventiveness as prescribed in Article 22, clause 3 of the Patent Law of China since the claims 1-3 to which claim 8 refers do not possess novelty and the claims 5-7 to which claim 8 refers do not possess inventiveness.

8. Claim 9 refers to claim 8; for those skilled in the art, it is a commonly used technical measure to add a coil to connect with the capacitor in order to change the resistance; therefore, claim 9 does not possess inventiveness as prescribed in Article 22, clause 3 of the Patent Law of China since claim 8 to which claim 9 refers does not possess inventiveness.

9. Claim 10 refers to claims 8 and 9; for those skilled in the art, it is a commonly used technical measure to add a filter unit in a circuit in order to filter the circuit; therefore, claim 10 does not possess inventiveness as prescribed in Article 22, clause 3 of the Patent Law of China since claims 8 and 9 to which claim 10 refers do not possess inventiveness.

10. Claim 11 seeks protection for a “Verfahren zum Einstellen der Impedanz einer Wechselstrom führenden Hochspannungsleitung”, whereas Reference 1 (US 6,274,851 B1) has disclosed a multiphase control method for adjusting alternating current and the following technical features in detail: the alternating current voltage source 12 providing a three phase 230k VAG via wires (equivalent to the “Hochspannungsleitung 9”), coil 40 (equivalent to the “Regelspule 2”) connected with the input wire in series, the controllable Silicon Controlled Rectifiers (SCR) 36 (equivalent to the “Schalteinrichtung 3”) connected with the coil 40 in series, the controller 18 (equivalent to the “Steuerungseinheit 4”) for controlling the SCRs 36 (see columns 4-6, 9 and 10 of the specification and Figs. 1 and 3). It can be seen that Reference 1 discloses all the technical features of claim 11, and the technical solution disclosed in Reference 1 and the technical solution sought for protection in said claim belong to a same technical field, solve the same technical problem and bring about same technical effects, so said claim does not possess novelty as prescribed in Article 22, clause 2 of the Patent Law of China.

11. Claim 12 seeks protection for a “Steuerungseinheit zum Einstellen der Impedanz einer Wechselstrom führenden Hochspannungsleitung”, whereas Reference 1 (US 6,274,851 B1) has disclosed a multiphase control device for adjusting alternating current and the following technical features in detail: the alternating current voltage source 12 providing a three phase 230k VAG via wires (equivalent to the “Hochspannungsleitung 9”), coil 40 (equivalent to the “Regelspule 2”) connected with the input wire in series, the controllable Silicon Controlled Rectifiers (SCR) 36 (equivalent to the “Schalteinrichtung 3”) connected with the coil 40 in series, the controller 18 for controlling the SCRs 36; the controller 18 has zero-crossing detectors 46 (equivalent to the “Nulldurchgangseinheit 12”) connected with the current detectors, and a digital signal processor 50 (equivalent to the “Zündwinkelgeber 19”) is connected with a microcontroller 52 (equivalent to the “Auslöseeinheit”) (see columns 4-6, 9 and 10 of the specification and Figs. 1 and 3). Said claim differs from Reference 1 in that “nach einer dem Zündsignal entsprechenden Verzögerungszeit ein Auslösesignal erzeugt wird”; for those skilled in the art, it is a commonly used technical measure to output the triggering signal after some time delayed; therefore, it is obvious for those skilled in the art to obtain the technical solution sought for protection in said claim by combining the technical measure used commonly in the art with Reference 1 as a basis; therefore, the technical solution sought for protection in said claim does not bring about any prominent substantive features or represent a notable progress, and thus does not possess

inventiveness as prescribed in Article 22, clause 3 of the Patent Law of China.

**Claims 6 and 7 do not comply with the provision of Rule 20, paragraph 4 of the Implementing Regulations of the Patent Law of China; claims 7 and 8 do not comply with the provision of Rule 23, paragraph 2 of the Implementing Regulations of the Patent Law of China; claim 4 does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Patent Law of China.**

1. The technical feature “Schalteinrichtung (3a, 3b)” defined in claim 6 is inconsistent with the technical feature “Schalteinrichtung (3)” defined in claim 1; a same component should be indicated with a same Reference sign, and different Reference signs should indicate different components so as to distinguish from others, so claim 6 does not comply with the provision of Rule 20, paragraph 4 of the Implementing Regulations of the Patent Law of China; for the same reason, the technical features “Schalteinrichtung (3a)” and “Schalteinrichtung (3b)” defined in claim 7 is also inconsistent with the technical feature “Schalteinrichtung (3)” defined in claim 1, so claim 7 does not comply with the provision of Rule 20, paragraph 4 of the Implementing Regulations of the Patent Law of China, either.

2. Dependent claim 7 per se is multiple dependent claim, and thus cannot refer to the other multiple dependent claim 5; therefore, claim 7 does not comply with the provision of Rule 23, paragraph 2 of the Implementing Regulations of the Patent Law of China. By the same token, the dependent claim 8 also cannot refer to another multiple dependent claim, so claim 8 does not comply with the provision of Rule 23, paragraph 2 of the Implementing Regulations of the Patent Law of China. The applicant should amend the reference relations of said claims.

3. Claim 4 defines the technical feature “eine Abgleicheinheit zum ...”; but it is unclear for what the “Abweichungen” is provided by the “Abgleicheinheit”, which means that it is unclear what the function of the “Abweichungen” is, which renders the protection scope of the above claim unclear, and thus does not comply with the provision of Rule 20, paragraph 1 of the Implementing Regulations of the Patent Law of China.

Based on the above reasons, the present application can not be granted a patent right under the current text. The applicant should reply within the response time limit as designated in the present Office Action, explain all the problems pointed out in the present Office Action one by one in detail, and make amendments to the patent application document in accordance with the opinions in the present Office Action, especially make amendments to the independent claims and the corresponding dependent claims in accordance with the reference documents cited in the present Office Action, and expound the reasons to prove the newly amended independent claims possess novelty and inventiveness comparing with the Reference Documents

cited in the Office Action and the prior art whose filing date is before that mentioned in the original specification. Furthermore, the specification shall be amended adaptively according to the amended claims. The amendments to the application text by the applicant should not go beyond the indicated scope of the original specification and claims so as to comply with the provision of Article 33 of the Patent Law of China.

Examiner: Guo Liang  
Code: 9765

WYA